Jack of All Trades, Master of None: Combat Engineer Officer Assignments in the Marine Corps Subject Area General

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# Jack of All Trades, Master of None:

Combat Engineer Officer Assignments in the Marine Corps

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Submitted by Captain W. G. Carr

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Combat engineers are assigned throughout the Marine Air Ground Task Force (MAGTF) and provide a wide variety of capabilities. The skill sets a combat engineer officer employs differ significantly depending on what element of the MAGTF to which he is assigned. The nation's current conflicts are both engineer intensive and rapidly changing. Contemporary personnel assignment procedures take a seasoned, specially trained Marine and throw him into an environment requiring skill sets that he has never exercised. With limited preparation, this Marine is then expected to employ these significantly different skill sets as a subject matter expert. As a result, traditional officer assignment practices in the case of combat engineer officers (MOS 1302) do not properly support all elements of the MAGTF with well prepared company grade officers. Assignment policies should be revised to conform to the realities Marines face today.

## A Mile Wide, But Only an Inch Deep

The combat engineer field in the Marine Corps covers an incredible breadth of disciplines, from construction project management to mine sweeping to reconnaissance. An officer can study all of these functions, at least academically, but he cannot become a true subject matter expert in all of them--there

are just too many. Because of this, the combat engineer is sometimes described as being a mile wide and an inch deep.

Combat engineering consists of four main functions: mobility, countermobility, survivability, and general engineering. These four functional areas translate into an incredible number of possible missions, requiring a great variety of technical capabilities. Mobility missions can require sweeping routes for landmines, building bridges, constructing and maintaining roads, breaching obstacles, clearing mines, urban breaching, engineer reconnaissance, helicopter landing zone construction, forward arming and refueling point (FARP) support, and more. Countermobility tasks include landmine warfare, demolitions, barrier planning, engagement area development, and obstacle construction. Survivability tasks include field fortification design and construction, blast mitigation, construction standards, and planning and constructing entry control points. The task of general engineering support is the widest of all, including water production, handling of bulk liquids (fuel and water), horizontal and vertical construction, electricity production, hygiene support, cantonment planning, aviation ground support, material handling, and sustainment projects, to name but a few. This partial list of possible missions illustrates how many

different tasks young officers are expected to master during only three months at the entry-level formal school. Obviously, some subjects cannot be covered as thoroughly as would be ideal and must be left for on-the-job-training (OJT).

Upon graduation from Marine Corps Engineer School, the newly-minted combat engineer officer can be assigned to one of three unit types -- a combat engineer battalion (CEB) in support of the ground combat element, an engineer support battalion (ESB) in a Marine logistics group, or a Marine wing support squadron (MWSS) providing aviation ground support to the aviation combat element. Each of these units will provide the new officer with vastly different experiences. The CEB Marines work closely with the combat arms, often as an attachment to an infantry unit, with their focus primarily on counter-mine/IED defeat operations, demolitions, breaching, and reconnaissance. Marines in the ESB primarily provide mobility and general engineering support, including missions in expeditionary construction, heavy equipment support, military bridges and gap crossing, bulk water production/storage, bulk fuels, and electrical generation. Combat engineers in the MWSS are focused on aviation ground support, conducting general engineering tasks--such as rapid runway repair, bulk fuel handling, heavy equipment support, and construction.

By the end of the usual three-year tour, the combat engineer officer has become a true expert in providing engineer support to his element of the MAGTF. He has learned many things not covered in the formal school and may have even deployed with his unit to combat. He is a seasoned professional. However, his experiences may not have prepared him to work in another element of the MAGTF with a very different mission.

## Well-Rounded MAGTF Officers

Conventional wisdom in the career path of MOS 1302 company grade officers is to serve one tour in either a MWSS, an ESB, or a CEB, followed by a tour in a B-billet, and then a return to the fleet as a captain (and company commander) in a different element of the MAGTF. The idea behind this approach is to give each officer a wide range of experiences, resulting in well-rounded field grade officers with credibility in all functions of engineering. By the time an engineer officer reaches the rank of major, he may have served in the division, the air wing, and in the logistics group, or at least in two of these three. This assignment practice results in well-rounded field grade officers, who understand the "big picture" of MAGTF engineering. This is the primary reason generally given by senior officers for maintaining the status quo.

Another motive is that traditional thinking in the Marine Corps holds that all engineers are the same, and thus engineers from an ESB, CEB, or MWSS can be used interchangeably at any point on the battle field. Theoretically, this allows the massing of engineers when necessary to handle a particularly engineer-intensive operation.

Personnel management concerns are another reason. Treating all engineer officers as interchangeable provides flexibility in assignments, and forces each engineer to possess a very wide range of knowledge. The engineer officer can therefore be plugged into a billet anywhere in the MAGTF. This idea of interchangeability had merit in the past, but with the rapid advances in technology and tactics in recent years, it is no longer valid.

### Asses are Well Rounded. Weapons Have Points.

The problem with the traditional engineer career path is that it causes an officer's knowledge base to be too broad and generalized to be of practical use. Many functions carried out by combat engineers are very technical in nature, and there are many of them. It is unreasonable to expect one Marine to learn, understand, and train to the incredibly long laundry list of subjects. Instead, he will naturally pick the missions he

expects to be called upon to perform and will focus his training there. Thus Marines serving in a CEB will train to a very different list of tasks than Marines serving in an MWSS or in an ESB.

Often, a new second lieutenant is being led by a captain who may be just as new to the job as he is. The captain has likely gained plenty of experience during his previous tour, but since requirements for engineers in each element of the MAGTF differ so significantly, his experience may not apply in his present situation. If the captain's experience was in a very different environment performing different work, he cannot offer much in the way of useful training and guidance. This lack of applicable experiences will hurt the company commander's mentoring of his junior officers, which will in turn degrade the training of the entire unit. Ignoring this fact seems only to guarantee that there will be less than optimally prepared engineer officers at the company and platoon levels.

For the captain reporting to a combat engineer battalion, there is an additional task that he must perform—that of regimental engineer officer. At a CEB, company commanders wear two hats—performing the duties of commanding officer and serving on the regimental staff of an infantry regiment. If this captain came from an MWSS or ESB, then he has likely had no

experience as an engineer platoon commander in support of an infantry battalion. He has most likely never participated in a mechanized breach, never learned the finer points of urban breaching, and never fired a Mk153 SMAW. Now he must advise the regimental commander on all matters regarding the employment of his engineers. This is potentially a very dangerous situation in the worst case; at the least it is obvious that this officer has not been set up for success.

Of course, good Marines will crack the books, talk to other engineers, and do whatever they can to prepare themselves for their new assignment to keep from "dropping the ball." Others will just keep a low profile for the first few months in their new assignment, while they figure things out. In this way the ship is kept afloat, but it is hardly the best way to do business--particularly during a shooting war.

Combat operations in Iraq and Afghanistan have resulted in rapid changes in the engineer field. Rapidly evolving improvised explosive device (IED) defeat tactics, new standard bridges, new mine detectors, new dust abatement products, and new vehicles are examples of some of the recent developments to hit the engineer field. These conflicts have also greatly reduced the amount of training time available. It was one thing for an officer to take six months or a year to learn his job

during peacetime; it is another thing entirely for this to happen in combat. The Corps can no longer pretend that this problem does not exist, or wish it away. Good Marines will always "make it work" in any situation, but these same Marines could perform even better with a more realistic approach.

### Female Combat Engineers

Another wrinkle to this predicament is the assignment of female officers to the 1302 MOS. According to the 2005 Marine Corps Almanac, there are forty-three female combat engineer officers, which amount to about 8% of the total engineer officers.3 These Marines cannot be assigned to a combat engineer battalion, because it is considered a front-line combat unit. The fact that female combat engineers can serve only in the MWSS or in the ESB illustrates the hypocrisy of the current policy. If assignment to each element of the MAGTF is so important, what about these Marines? Will female officers be less competitive for promotion or battalion command due to their lack of division experience? Perhaps female engineers enjoy an unfair advantage, given that they will not be thrown into the vastly different CEB, and therefore may perform better than their male peers? These questions have not been thoroughly considered and will have far-reaching implications on the engineer occupational field as a whole as these female officers gain seniority.

### Career tracks that make sense

These problems have a simple and rather obvious solution:
Assign a captain for company command to the same element of the
MAGTF in which he served as a lieutenant. He can gain a broader
perspective and become well-rounded in subsequent tours as a
senior captain and as a major. This will solve immediately the
problem of inexperienced officers in company command. Creating
continuity will also help level the playing field for female and
male engineer officers, because both male and female officers
will remain in their elements. Most importantly, placing an
officer in an environment in which he has had previous
experience will have a vast, positive impact on the training and
mentoring of junior officers which, in turn, will result in
improvements in the support these engineers provide to the
entire Marine Air Ground Task Force.

We must approach the situation logically and systematically. Enlisted Marines now have MOS roadmaps, which spell out the key milestones to which a Marine should strive in order to be successful. It is time to develop a similar guide for combat engineer officers, outlining the proper career track for the engineer, mindful of the technical nature of the field, and capitalizing on his hard-won experience by aligning his company command tour with his previous assignments.

### Conclusion

Current combat engineer officer assignment practices make a deliberate effort to put the engineer officer into a position for which he is unprepared. Doing business this way squanders hard-won combat experience, hurts the development of new officers, and reduces the quality of engineer support to the MAGTF. Well-rounded field grade officers do not have to come at the cost of unfocused, ill-prepared, insufficiently trained company grade officers. Assignment of combat engineer officers to the same MAGTF element through company command will improve engineer support at all levels throughout the MAGTF.

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